Claims

1. A method for substitutive connection of spatially separated switching systems which are arranged in pairs having 1:1
5   redundancy, wherein the one switching system (S_1) is in an active operating state ("act") and the remaining redundant switching system (S_{1b}) is in a hot-standby operating state ("idle"),
characterized in that
10 communication is established between at least one superordinate monitor (SC) and at least one of the paired switching systems (S_1, S_{1b}) and, in the event of a loss of communication to the active switching system (S_1), a changeover to the redundant switching system (S_{1b}) is effected in real
15 time with the support of the central controller (CP) of said redundant switching system (S_{1b}).

2. The method as claimed in claim 1,
characterized in that
20 test messages are cyclically exchanged between the at least one superordinate monitor (SC) and the central controllers (CP) of the two paired switching systems (S_1, S_{1b}).

3. The method as claimed in claim 1, 2,
25 characterized in that
the exchange of the cyclical test messages between the superordinate monitor (SC) and the central controller (CP) of the active switching system (S_1) is controlled by means of the active switching system (S_1), supported by its central
30 controller (CP), cyclically registering with the monitor (SC) and receiving a positive acknowledgement in response to this (e.g. every 10 s).

4. The method as claimed in claims 1 to 3,

characterized in that

the exchange of the cyclical test messages between the
superordinate monitor (SC) and the central controller (CP) of
the hot-standby switching system (S_{1b}) is controlled by means
5 of the hot-standby switching system (S_{1b}), supported by its
central controller (CP), cyclically registering with the
monitor (SC) and receiving no acknowledgement or a negative
acknowledgement in response to this (e.g. every 10 s).

10 5. The method as claimed in claims 1 to 4,
characterized in that
the verified loss of communication with the switching system
that is actively switching is reported by the monitor (SC) to
the network management (NM) which consequently, according to
15 the availability of switching system (S_{1b}), sends changeover
instructions to the at least one monitor (SC).

6. The method as claimed in claim 1, 2 or 3,
characterized in that
20 the changeover to the redundant switching system (S_{1b}) is
controlled by the monitor (SC) by means of said monitor using
a positive acknowledgement to acknowledge the cyclical
requests ("request") of the hot-standby switching system (S_{1b}),
whereupon this switching system (S_{1b}) is explicitly set to the
25 active switching state by its central controller (CP).

7. The method as claimed in one of the preceding claims,
characterized in that
following resolution of the communication loss, automatic
30 reversion to the configuration which existed before the
communication loss is not effected.

8. A monitor for monitoring and connecting switching systems,
which is divided into at least two spatially separate parts,

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and which changes over to a redundantly assigned switching system in real time if a switching system fails.

9. The method as claimed in claim 8,
characterized in that
the at least two parts (SC_1 and SC_2) of the monitor (SC) monitor each other reciprocally,
and that a communication fault between one of the at least two parts and the currently active switching system (S_1) causes the at least two parts (SC_1 and SC_2) to synchronize themselves reciprocally and to activate or not activate the redundant switching system (S_{1b}).

10. The method as claimed in claim 8, 9,
characterized in that
in the event of a communication fault between the at least two parts (SC_1 and SC_2), only the operating state of the switching systems (S_1, S_{1b}) which was most recently determined in the at least two parts (SC_1, SC_2) is maintained.